UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Tradeunark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vinginia 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

Thomas B. Haverstock 162 North Wolfe Road Sunnyvale, CA 94086 11/29/2011 EXAMINER
ALAM, SHAHID AL

ART UNIT PAPER NUMBER

2162

DATE MAILED: 11/29/2011

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFRMATION NO.

 004491 675
 01/26/0000
 David I. Multer
 FINS-04101
 8895

TITLE OF INVENTION: DATA TRANSFER AND SYNCHRONIZATION SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$870	\$0	\$0	\$870	02/29/2012

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1313 AND MPPE J 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address and indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or by indicating a separate "FEE ADDRESS" for maintenance fee notification

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 759n 11/29/2011 Certificate of Mailing or Transmission Thomas B. Haverstock I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. 162 North Wolfe Road Sunnvvale, CA 94086 (Depositor's name (Signatur (Date APPLICATION NO FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO CONFIRMATION NO 09/491 675 01/26/2000 David L. Multer FUSI-04101 0000 TITLE OF INVENTION: DATA TRANSFER AND SYNCHRONIZATION SYSTEM APPLN, TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional YES \$870 SO 50 \$870 02/29/2012 CT ASS-SUBCLASS EVAMINED APTIMIT ALAM, SHAHID AL 2162 707-001000 1. Change of correspondence address or indication of "Fee Address" (37 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a

Proc Address" indication (or "Fee Address" Indication form PTO/SB4/7; Rev 03-02 or more recent) attached. Use of a Customer Number is required.	registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON	THE PATENT (print or type)
PLEASE NOTE: Unless an assignee is identified below, no assignee recordation as set forth in 37 CFR 3.11. Completion of this form is NO	data will appear on the patent. If an assignee is identified below, the document has been filed for OT a substitute for filing an assignment.
(A) NAME OF ASSIGNEE	(B) RESIDENCE: (CITY and STATE OR COUNTRY)
The state of the s	printed on the patent):
Please check the appropriate assignee category or categories (will not be p	orinted on the patent):
	b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)
☐ Issue Fee	A check is enclosed.
☐ Publication Fee (No small entity discount permitted)	■ Payment by credit card. Form PTO-2038 is attached.
Advance Order - # of Copies	The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number
5. Change in Entity Status (from status indicated above)	
a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.	□ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).
NOTE: The Issue Fee and Publication Fee (if required) will not be accepte interest as shown by the records of the United States Patent and Trademar.	ed from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in k Office.
Authorized Signature	Date
Authorized Signature	Date

Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time your require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer. U.S. Patert and Trademark Officer. U.S. Peterstreat of Commerce, P.O. Box 1450, Alexandria, Virginia 2231-450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 2231-450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/491,675	01/26/2000	David L. Multer	FUSI-04101 8895	
7590 11/29/2011 Thomas B. Haverstock 162 North Wolfe Road Sumyvale, CA 94086			EXAMINER	
			ALAM, SHAHID AL	
			ART UNIT	PAPER NUMBER

DATE MAILED: 11/29/2011

Determination of Patent Term Extension under 35 U.S.C. 154 (b)

(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 1826 day(s). Any patent to issue from the above-identified application will include an indication of the 1826 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2): (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom
 of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of
 records may be disclosed to the Department of Justice to determine whether disclosure of these
 records is required by the Freedom of Information Act.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement necotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his-fher designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2004 and 2006. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability

Application No.	Applicant(s)	
09/491,675	MULTER ET AL.	
Examiner	Art Unit	
SHAHID ALAM	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed, a Notice of Allowance (PTOL-85) or other appropriate communication will be added in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. All This communication is responsive to BPAI decision on 7/22/2011.
2. An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction

requirement and election have been incorporated into this action.

The allowed claim(s) is/are 51-53, 61, 63, 65, 67 - 70 and 72.
 Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of the:

Certified copies of the priority documents have been received.

Certified copies of the priority documents have been received in Application No. _____.

 Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.

THIS THREF ANONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) hereto or 2) to Paper No./Mail Date

(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment	(م)
Attacimient	(5)

1. Notice of References Cited (PTO-892)

Notice of Draftperson's Patent Drawing Review (PTO-948)

 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 06262009-09202011

Paper No./Mail Date 06262009-09202011
 Examiner's Comment Regarding Requirement for Deposit of Biological Material

Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

5. Notice of Informal Patent Application

 Interview Summary (PTO-413), Paper No./Mail Date

9. 🔲 Other ___

/Shahid Al Alam/

Primary Examiner, Art Unit 2162

DETAILED ACTION

Information Disclosure Statement

 The information disclosure statement (IDS) submitted from 06/26/2009 to 09/20/2011 (all inclusive) have been considered.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization and consultation for this examiner's amendment was given in a telephone interview with Thomas B. Haverstock on September 22 and 29, 2011.

Claims amended as per BPAI decision and under regulation MPEP 1213 and Form Paragraph 12.119.01:

The application has been amended as follows:

In the claim:

- 1-48. (canceled)
- 49. (canceled)
- 50. (canceled)

Application/Control Number: 09/491,675

Art Unit: 2162

51. (currently amended) A data synchronization system for a first system having a plurality of data sources each with a data source format, and a second system having a plurality of data sources each with a data source format; comprising:

a first data eynehronization synchronizer on the first system transmitting at least one set of difference information to an output;

a second data synchronizer on the second system capable of receiving said at least one set of difference information; and

a network for coupling the first file system and the second file system to allow communication between the first file system and the second file system when the first and second file systems are physically remote from each other.

wherein each said data synchronizer comprises:

	a data source interface;
	a copy of a previous state of each said data source;
	a source data constructor applying difference information to said copy;
and	
	a difference information generator.

52. (original) The data synchronization system of claim 51 wherein said difference information is transmitted from said first synchronizer to said second synchronizer in a universal format.

Application/Control Number: 09/491,675

Art Unit: 2162

53. (original) The data synchronization system of claim [[51]] 49 wherein said data synchronizer includes a plurality of difference source interfaces, each corresponding to a data source format.

54. (canceled)

55-60. (canceled)

61. (previously presented) A data synchronization system, comprising:

a server;

a network to which the server is operatively coupled;

a first system having a plurality of data file types;

a differencing synchronizer on the first system extracting a first set of differencing data from the data files on the first system when the data files on the system are changed, outputting the differencing data to the server, and retrieving differencing data from the server and applying it to selected data files on the first system:

at least one second system having a second plurality of data file types; and

a differencing synchronizer on the second system extracting the differencing data from the data files on the second system when the data files on the system are changed, outputting the differencing data to the server via

Application/Control Number: 09/491,675 Page 5

Art Unit: 2162

the first set of differencing data from the server via the network and applying it to the

selected data files on the second system.

62. (canceled)

63. (previously presented) The system of claim 61 wherein said systems are coupled

via the Internet.

64. (canceled)

65. (original) The data synchronization system of claim 61 wherein said first system

is a server and said second system is a device capable of communicating with said

server.

66. (canceled)

67. (currently amended) A method for synchronizing at least a first file and a second

file resident on a first and a second systems, respectively, comprising:

(a) determining difference data resulting from changes to a first file on

the first system, comprising comparing data from the first file to a copy of \underline{a}

previous state of data from the first file;

(b) transmitting the difference information to a remote second system

via a network;

(c) applying the difference information to generate change data for the

second file: and

Art Unit: 2162

 (d) updating the second file on the second system with the difference data.

- 68. (original) The method of claim 67 wherein said comparing step comprises extracting data from said first file, converting said data to a universal file format, providing said copy of said data in said universal format, and comparing said data and said copy to provide difference data in said universal format.
- 69. (original) The method of claim 68 wherein said step of applying comprises: constructing new file data for said second file in said universal data format.
- (original) The method of claim 69 wherein said step of updating comprises translating said new file data into a format of said second file.
- 71. (canceled)
- (previously presented) The method of claim 69 wherein the network is the Internet.
- 73 75. (canceled)

Claims 51 - 53, 61, 63, 65, 67 - 70 and 72 are allowed.

Claims 1 - 51, 54 - 60, 62, 64, 66 and 73 - 75 are canceled.

Application/Control Number: 09/491,675

Art Unit: 2162

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHAHID ALAM whose telephone number is (571)272-4030. The examiner can normally be reached on Monday-Thursday 8:00 A.M.- 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shahid Al Alam/ Primary Examiner, Art Unit 2162

September 29, 2011